



IDM TECHPARK

GUIDE'S FOR PERFECT CAREER PATHWAY



ASP.NET Course Syllabus



N.S.D.C.
National
Skill Development
Corporation



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About Us

IDMTECHPARK global retail & corporate training solutions provider in Coimbatore, Erode, Trichy & Salem that offers a comprehensive range of training and placement services for both fresher's and professionals seeking new opportunities. The company commenced its IT training business in 2016. A pioneer in IT education, over the years, we have trained over 50k students. Idmtechpark has a wide range of courses, maintains education standards & provides placement assistance.

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About IDMTECHpark Education Quality

IDMTECHPARK is managed and developed by industry specialists with more than 8 years of expertise in the field. IDMTECHPARK offers a staff of highly skilled professional trainers who deliver effective IT training in a friendly setting, concentrating on the needs of each individual to help them succeed in a demanding work world. In the book of career and success, our staff never leaves a page unturned.

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IDMTECHPARK's versatile instructor-led training class rooms and lower-class sizes enable people to engage more easily and absorb knowledge, resulting in remarkable results for both themselves and the organizations for which they work. Our training programmes are adaptable and customizable to ensure that each participant gets the most out of their time with us. IDMTECHPARK focuses in providing hands-on IT training in over 30 different courses.

- We teach in-demand courses
- We provide impactful learning material
- Our teachers are well-selected & trained
- We follow world-class teaching methods
- Our courses include E-Projects
- We conduct technical workshops
- Exams are held and based on Exams providing Certification
- Certificates are recognized the world over
- Our course timings are flexible



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Our Recent Placement

Idmtechpark assists students in getting job placements on successful completion of their courses. Idmtechpark also provides recruitment assistance to organizations. Idmtechpark students are shortlisted based on the organization's requirement. To make students job-ready, Idmtechpark conducts workshops e.g. How to do Group Discussions, how to behave in a Personal Interview. From time to time, job fairs & campus recruitments are conducted. Workplace skills such as time management, making effective presentations and communication skills are also provided. All this helps students find appropriate jobs in the IT industry while also helping save companies recruitment costs.

Krishnaveni M

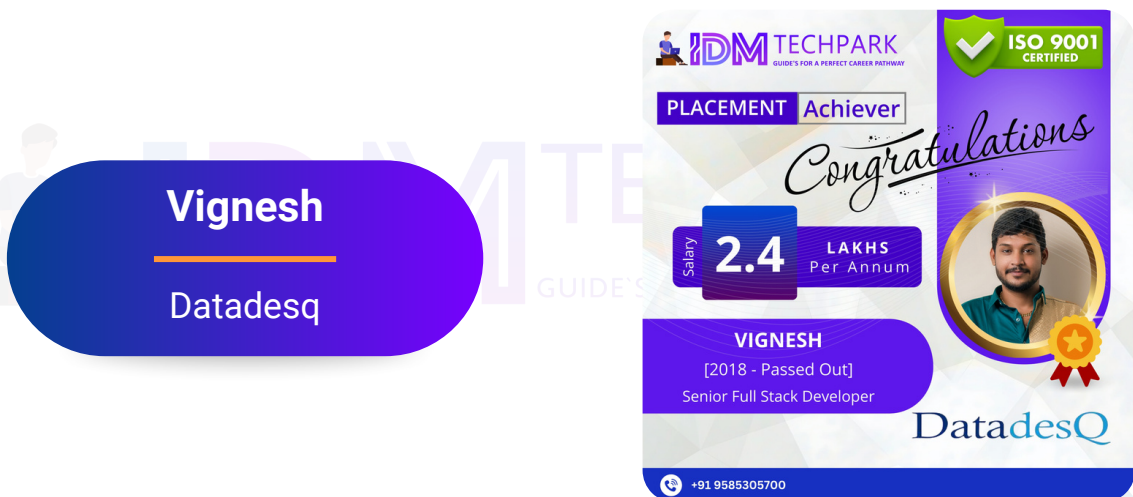
Frutterlabs





Joshwa

Xccessor



Vignesh

Datadesq



Madhumitha

Accenture

Keerthana

AJS



Brindha Boopathi

AJS



Kavin Kumar

AJS

Ajithkumar

AJS



Gowthami

Genpact



Surya

ZUCI

Pavithra

Vel Info Tech



Poovitha

Gray Matter



Ramesh

TDT

Siva Sankar
ST Cloudspark tech



Nabeel Hisham
VTail



Kalayarasan
Violet Infotech

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Our Alumni Working At



MODULE 1

Introduction to ASP.NET

- What is ASP.NET?
- ASP.NET Framework vs .NET Core
- Setting up Visual Studio / Visual Studio Code

MODULE 2

C# Fundamentals for ASP.NET

- Data types, Variables, Operators
- Control Statements (if, switch, loops)
- Methods, Classes, and Objects

MODULE 3

Introduction to .NET Core & ASP.NET Core

- .NET Core CLI
- Project structure
- Creating your first ASP.NET Core app

MODULE 4

Razor Pages & Views

- Razor syntax
- Layout pages, Partial
- ViewData, ViewBag, TempData



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MODULE 5

MVC Architecture in ASP.NET

- Model-View-Controller pattern
- Creating Controllers and Actions
- Strongly-typed Views

MODULE 6

Routing in ASP.NET Core

- Conventional vs Attribute Routing
- Route Constraints
- Route Templates

MODULE 7

Forms and Model Binding

- HTML Forms in Razor
- Form submission (GET, POST)
- Model validation with Data Annotations

MODULE 8

Entity Framework Core Basics

- Code First vs Database First
- DbContext and DbSet
- Creating & Using Models

MODULE 9

LINQ (Language Integrated Query)

- LINQ Syntax (Query & Method)
- Filtering, Sorting, Projections
- Aggregations and Joins

MODULE 10

CRUD Operations in ASP.NET

- Create, Read, Update, Delete
- Using EF Core with DbContext
- Async methods in database operations

MODULE 11

Layouts and UI Styling

- Bootstrap Integration
- Tag Helpers & HTML Helpers
- Custom CSS and JS

MODULE 12

Partial Views & View Components

- Reusable Components
- View Components vs Partial
- Dynamic rendering

MODULE 13

Dependency Injection

- Built-in DI container in ASP.NET Core
- Services and Scoped/Transient/Singleton lifetimes
- Injecting services in controllers



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MODULE 14

Middleware and Request Pipeline

- What is Middleware?
- Built-in middleware (StaticFiles, Routing, CORS)
- Creating custom middleware

MODULE 15

Configuration and AppSettings

- appsettings.json and environment configs
- Reading configs with IConfiguration
- Using secrets for sensitive data

MODULE 16

Logging and Error Handling

- Built-in logging providers
- Exception handling middleware
- Custom error pages

MODULE 17

User Authentication (Identity)

- ASP.NET Identity Basics
- Register/Login/Logout
- Password hashing & security

MODULE 18

Authorization & Roles

- Role-based and Policy-based authorization
- Custom policies
- Claims-based Identity



MODULE 19

RESTful API with ASP.NET Core Web API

- Creating Controllers for APIs
- Returning JSON data
- Using Postman/Swagger

MODULE 20

Consuming REST APIs in ASP.NET MVC

- HTTPClient in C#
- Calling External APIs
- Displaying API results in Razor Views

MODULE 21

File Uploads and Downloads

- Uploading files via form
- Validating file type and size
- Returning file responses

MODULE 22

SignalR – Real-time Communication

- What is SignalR?
- Real-time notifications/chat
- Client-server communication

MODULE 23

Unit Testing & Debugging

- Writing unit tests with xUnit/NUnit
- Mocking dependencies
- Debugging with breakpoints and logs

MODULE 24

Deployment

- Publishing ASP.NET Core App
- Deploying to IIS, Azure, or Docker
- Environment-specific deployment



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MODULE 25

Final Capstone Project

- Build a complete ASP.NET MVC or Core app
- Integrate authentication, EF Core, REST APIs
- Hosting on Azure / Local Server

Thank You

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